COURSE CODE : INT213
COURSE NAME : PYTHON PROGRAMMING

Time Allowed: 03:00 hrs   Max. Marks: 70

Read the following instructions carefully before attempting the question paper.

1. This question paper is divided into two parts A and B.
2. Part A contains 10 questions of 2 marks each. All questions are compulsory.
3. Part B contains 5 questions of 10 marks each. In each question attempt either question (a) or (b), in case both (a) and (b) questions are attempted for any question then only the first attempted question will be evaluated.
4. Answer all questions in serial order.
5. Do not write or mark anything on the question paper except your registration no. on the designated space.

PART A

Q1. a) Differentiate between keyword and variable.   [2 Marks]
b) Differentiate between for loop and while loop.   [2 Marks]
c) Write a program to find the length of list.   [2 Marks]
d) Differentiate between aliasing and copying a dictionary.   [2 Marks]
e) What are the different modes used in files.   [2 Marks]
f) Define polymorphism.   [2 Marks]
g) Define function overloading.   [2 Marks]
h) What is a graph? Write down the applications of graph.   [2 Marks]
i) What do you mean by clustering?   [2 Marks]
j) What is dynamic programming?   [2 Marks]

PART B

Q2. a) What do you mean by recursion? Write a python program to calculate the factorial of a number using recursion.   [10 Marks]

OR

b) i) Write a python program to compare two strings.   [5 Marks]
ii) Differentiate between formal arguments and actual arguments with example.   [5 Marks]

Q3. a) Define dictionary. Write a python program to add, delete, count, and copy the dictionary.   [10 Marks]

OR

b) i) Write a python program to create a login form using GUI.   [5 Marks]
ii) Write a python program to swap two values using tuples.   [5 Marks]

Q4. a) What do you mean by OOPS? Write down the features of OOPS.   [10 Marks]

OR

b) i) Write a python program to copy the content of one file into another file.   [5 Marks]
ii) Write a python program to illustrate the concept of pickling.   [5 Marks]

Q5. a) What do you mean by inheritance? Write a python program to implement single level inheritance.
                                                                                                       [10 Marks]

OR

b) i) What do you mean by knapsack problem?   [5 Marks]
ii) Write a python program to create a graph.   [5 Marks]

Q6. a) What do you mean by divide and conquer approach? Write a python program to implement binary search.   [10 Marks]

OR

b) i) Write a python program to calculate the Fibonacci series using dynamic programming.   [5 Marks]
ii) Explain python dictionary with an example .   [5 Marks]

---End of question paper---